

### **REMARKS**

Claims 22-38 are now pending in this application. Claims 22, 29, 30, 34, 37, and 38 are independent. Claims 22-38 has been added, and claims 1-21 have been canceled by this Amendment and Request for Continued Examination (RCE).

No new matter is involved with any new claim, as support may be found throughout the originally-filed disclosure, including the originally-filed claims.

### **Anticipation by Salmela et al.**

Withdrawal of the rejection of claims 1-7, 12, 14, 16-18 under 35 U.S.C. §102(a) as being anticipated by Salmela et al. (WO 98/30056) ("Salmela") is requested. The rejection has been rendered moot by the cancellation of these claims.

New claims 22-38 have replaced the previously-rejected claims. Applicants point out that Salmela still fails to disclose, teach, or suggest the use of exclusive location areas, as now variously claimed, for example, in independent claims 22, 29, 30, 34, 37, and 38.

### ***Discussion of Applicants' Disclosure***

By way of background, one or more embodiments of Applicants' disclosure are directed to a mobile communications method, network, network element, and mobile station in which exclusive location areas comprising exclusive cells are defined in order to separate cells from the mobile stations not belonging to the user group allowed to camp in the cell, and still to allow emergency calls for all mobile stations any sales. During location update, the system checks whether the cell belongs to an exclusive location area and, if it does, the system determines whether or not the subscriber is allowed to camp in the cell.

Such special service areas are commonly referred to as localized service areas (LSA), and the concept of LSA extends the operators' capability to offer different service features to subscriber or subscriber groups, different tariffs, and different access rights, depending on the location of the subscriber. One feature of the concept of LSA is "exclusive access" (EA). EA attributes may be managed as part of cell management. An exclusive access cell is a cell where

only mobile stations having the same exclusive access information as the cell are allowed to camp. With the EA concept, it is possible to guarantee that the members of a user group are the only users of the radio channels (physical resources) within a cell. In order to support exclusive access, other users' mobile stations must be prevented from camping in that cell. Emergency calls, however, should be allowed in a limited service state for every mobile station in the exclusive access cell.

In one or more aspects of Applicants' disclosed and claimed invention, specific exclusive location areas are used comprising exclusive cells, *i.e.*, cells with restricted access. Separate location areas are used for the normal cells, *i.e.*, non-exclusive cells. ***With such location areas, it is guaranteed that when entering a location area, a location update is triggered.*** During the location update procedure, the subscriber's right to access the cell is determined. If the subscriber is not a member of the user group allowed to camp in an exclusive cell, the location update will be rejected. However, the rejection of location update will still allow emergency calls to be placed in a limited service state.

As further background, Applicants' disclosure at ¶ [0004] discusses the fact that mobile stations not supporting LSA are not impacted by local service areas, and ¶ [0010] discloses an embodiment of Applicants' disclosure that uses a location areas and location area updates in a procedure that determines a mobile station's right to access the cell.

### ***Discussion of Salmela et al.***

According to the Abstract, Salmela et al. ("Salmela") is purportedly directed to mobile communications system in which localize special services are offered by a method for controlling the local operation of a mobile station (MS) which includes forming a group of special cells from selected network cells, and controlling the operation of the mobile station on the basis of the group. According to the disclosure of Salmela, if the old and/or new cell is a special cell, information on this is transmitted to the mobile station already in a handover command, whereby the mobile station may refuse handover.

Salmela merely discloses a solution for providing localized services in cellular systems. In Salmela, location areas form regions within each of which the mobile station may roam freely without notifying the visiting location register. Additionally, Salmela discloses that a list of

special cells may be defined for a subscriber. The cells in this list form a subscriber-specific localized service area that is, by definition, specific to the subscriber. That list of special cells may be utilized to control the operation of the mobile station used by the subscriber. Salmela also discusses several types of special cells, and mentions also control operations restricting the access of the mobile station to some cells.

The Examiner appears to have misunderstood the disclosure of Salmela by seemingly equating Salmela's Localized Service Areas (LSA) with Applicants' claimed location area. However, Salmela fails to disclose, teach or suggest defining some of the location areas to be exclusive location areas each associated with a respective Location Area Code (LAC), an exclusive location area including exclusive cells for which an exclusive service condition is defined.

The Office Action erroneously equates Salmela's location areas, which are defined as a list of special cells drawn up for a subscriber (for example, page 4, lines 9-10, and 15-16, and page 5, lines 15-16, and page 15, lines 26-33), to Applicants' claimed exclusive areas. Thus, Salmela's definition is made ***for a subscriber*** or a subscriber group (page 15, lines 26-28), ***and not for a location area*** of the network subsystem. A special cell of a location area may then naturally exist in a special service area; however, in Salmela, the other cells with the same location area identifier may or may not belong to the special service area. Thus, a subscriber roaming within a location area may try to camp in special cells and non-special cells without having a trigger to update its location.

Moreover, Salmela fails to disclose, teach or suggest checking, during a location update procedure, whether a new location area indicated by the LAC is defined as an exclusive location area. Since no exclusive location areas are defined, such checking is neither discussed nor suggested in Salmela. In fact, the only action implemented during the location update procedure in Salmela is delivery of the list of special cells to the mobile station, ***which is clearly not the same as the action implemented during the claimed location update procedure***. Simply put, ***delivery of a list of special cells does not correspond with checking a location area type***.

Although Salmela does disclose a checking operation, it occurs at a different stage, *i.e.*, when the mobile station receives a new broadcast cell identifier. The checking is also

implemented differently in that the mobile station checks whether the new cell is in its own list of special cells. Thus, ***checking a cell identifier does not correspond with checking a location area, as variously claimed.***

Additionally, Salmela fails to disclose or suggest using an exclusive service condition of a cell in determining whether or not the subscriber is allowed to camp in the cell. To the contrary, in Salmela, ***any*** control operations restricting the user's ability to camp in the cell are made based on a list of cells of a subscriber, ***not*** on an exclusive service condition that is defined for a particular cell and governing operations of that cell. A cell identifier itself does not relate to any particular service, and ***a list cell identifiers of a subscriber*** is clearly not the same as ***an exclusive service condition of a cell.***

Salmela discloses that a cell (identified by cell identity), a location area (identified with LAI), and the localized service area (identified by LSA-IDs) do not correspond to each other, and therefore differ from each other. See, e.g., page 2, lines 3-4, "[t]he geographical area controlled by the visitor location register is divided into one or more location areas LA, within each of which the MS may roam freely without notifying the VLR", and also see page 5, lines 14-18 which states "a special service area is defined for a mobile subscriber by drawing up a list of certain network cells, *i.e.*, special cells, for the subscriber. The list can be utilized in a mobile station or in a fixed network. In the present application, such a special service areas referred to as LSA (Localised Service Area)".

***In other words, the "location area" disclosed in Salmela arguably corresponds to the "location area" defined in Applicants' claims, however the "localized service area" in Salmela does not correspond to the location areas defined in Applicants claims.***

In the Office Action, the Examiner states that Salmela teaches defining some of the location areas to be localized service areas. However, ***Salmela does not teach a location area defined to be localized service area*** (page 4, lines 1-12 disclose subscriber-specific localized service areas comprising selected network cells; page 5, lines 14-18 discloses the above definition for mobile station-specific localized service area; page 7, lines 26-28 discloses mobile station-specific localized service area; and page 8, line 6-12 discloses a definition of the special cell). In addition, and assuming, *arguendo*, that Salmela taught or suggested the above features,

which it does not, Applicants' claimed feature relates only to location areas which do *not* correspond to localized service areas.

**Unpatentability Rejection over Salmela et al. in view of Nordstrand and Seppanen et al.**

Withdrawal of the rejection of claims 8, 10-11, 13, 15 and 19-20 under 35 U.S.C. §103(a) as allegedly being unpatentable over Salmela in view of Nordstrand (US 6,334,052 B1) and Seppanen et al. (US 5,903,832) ("Seppanen") is requested. These claims have been canceled, thus rendering their rejection moot.

The Office Action admitted the deficiencies of Salmela in failing to teach or suggest determining the possibility of camping in a mobile station and camping measurements being taken after that in the previously pending claims, and alleged that Nordstrand remedies this deficiency.

Accordingly, since the applied art does not teach or suggest all the claimed limitations, reconsideration and allowance of independent claims 10 and 19 are respectfully requested. In addition, dependent claims 11 and 20 depend from these allowable independent claims, respectively, and are submitted as being allowable at least on that basis, without further recourse to the patentable features recited therein.

**Unpatentability Rejection - Salmela and Alleged "Well-Known" Art supported by Rune**

Withdrawal of the rejection of claim 9 under 35 U.S.C. §103(a) as allegedly being unpatentable over Salmela in view of well-known art and allegedly supported by Rune (US 6,212,390) is requested. Claim 9 has been canceled, thus rendering its rejection moot.

**Unpatentability Rejection over Nordstrand in View of Seppanen et al.**

Withdrawal of the rejection of claims 19-20 under 35 U.S.C. §103(a) as allegedly being unpatentable over Nordstrand in view of Seppanen is requested. These claims have been canceled, thus rendering their rejection moot.

### **New Claims**

New claims 22-38 have been drafted to further define that which Applicants are entitled to claim. No new matter is involved with these claims, as support may be found throughout the originally-filed disclosure, including the originally-filed claims.

### **Conclusion**

All rejections having been addressed, Applicant submits that each of pending claims 22-28 in the present application is in immediate condition for allowance. An early indication of the same would be appreciated.

In the event the Examiner believes that an interview would be helpful in resolving any outstanding issues in this case, the Undersigned Attorney is available at the telephone number indicated below.

For any fees that are due, including fees for excess claims, the Request for Continued Examination (RCE), and extensions of time, please charge Deposit Account Number 03-3975 from which the Undersigned Attorney is authorized to draw. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Date: September 15, 2008

Respectfully submitted,

**Electronic Signature:** \_\_\_\_/Larry J. Hume/\_\_\_\_

Larry J. Hume

Registration No.: 44,163

PILLSBURY WINTHROP SHAW PITTMAN LLP

P.O. Box 10500

McLean, VA 22102

(703) 770-7900 (switchboard)

(703) 770-7981 (direct)

(703) 770-7901 (fax)

e-mail: [Larry.Hume@pillsburylaw.com](mailto:Larry.Hume@pillsburylaw.com)

Attorney for Applicant

Attachment: Petition for 1-Month Extension of Time